

Senior Transportation Electrical Engineer (Supervisor)

California State Personnel Board Specification

- **Schematic Code:** GK23
- **Class Code:** 3164
- **Established:** 05/09/1990
- **Revised:** 04/06/1999
- **Title Changed:** --

Definition

Under general direction, to have charge of difficult electrical engineering work involving the supervision of journey level engineers and others engaged in highway lighting, traffic control systems, traffic management systems, and bridge and tunnel electrical systems; and perform other related activities.

Typical Tasks

In a metropolitan district, plans and directs the work of a group of engineers and other employees involved in the planning, design, research, testing, construction, and operation of highway lighting, traffic control, traffic management, and bridge and tunnel electrical systems; confers with manufacturers and contractors regarding the incorporation of new equipment and construction techniques and design standards; confers with local agencies on matters of a technical nature regarding electrical equipment and systems; and prepares correspondence and reports.

In Headquarters, directs and reviews the development and preparation of final electrical plans, specifications, and estimates as contract documents for construction contracts; supervises the preparation and documentation of contract addenda; responds to inquiries from districts, other agencies, contractors, and suppliers on standard specifications, standard special provisions, and plans; prepares correspondence, issue papers, and reports; and performs special studies.

Minimum Qualifications

Possession of a valid certificate of registration as an electrical engineer issued by the California Board of Registration for Professional Engineers. (Candidates who submit proof that they have applied for registration will be admitted to the examination, but must possess a valid certificate of registration before they may be appointed.) and Either I Experience: One year of experience in the California state service performing highway electrical or electronic engineering work as a Transportation Engineer (Electrical), Range D; Associate Transportation Electrical Engineer (Specialist); Associate Transportation Electrical Engineer (Supervisor); Associate Electronics Engineer; or Associate Electrical Engineer, Caltrans.

OR II

Experience: Five years of professional engineering experience, two years of which shall have been: (1) after obtaining registration as an Electrical Engineer from any state; and (2) in a lead or supervisory capacity in the design or construction inspection of highway lighting and traffic control systems. and

Education: Equivalent to graduation from a college accredited by the Accreditation Board for Engineering and Technology with major work in electrical, electronic, or computer engineering or equivalent degree approved by the Council for Private Postsecondary and Vocational Education under the provisions of California Education Code Chapter 3, Part 59, Division 10. (Additional qualifying experience may be substituted for the required education on a year-for-year basis.)

Knowledge and Abilities

Knowledge of: Design and preparation of plans, specifications, and estimates for highway lighting and traffic control systems; electrical and electronic theory as applied to highway lighting and traffic control systems; principles and practices of traffic engineering as they apply to highway lighting and traffic control; various codes and field practices governing the design and installation of highway lighting and traffic control equipment; basic occupational safety and health regulations contained in the Title 8 Industrial Relations, Electrical Safety Orders, safety and health policies and procedures as contained in the Department's Injury and Illness Prevention Program, and the supervisor's role in maintaining an effective injury and illness prevention program; materials and construction costs for highway lighting and traffic control systems; digital electronics, microprocessors, and development of strategies for traffic control; computer-based traffic management equipment; principles and techniques of personnel management; a manager's/supervisor's responsibility for promoting equal opportunity in hiring and employee development and promotion, and for maintaining a work environment that is free of discrimination and harassment; planning and supervising the work of others.

Ability to: Plan and direct the work of others; establish and maintain cooperative relations with those contacted in the course of the work; promote equal opportunity in employment and promotion, and maintain a work environment that is free of discrimination and harassment; prepare correspondence and reports; communicate effectively.

Updated 6/3/2012